

IN THE OATH/DECLARATION

A revised Declaration and Power of Attorney form is attached hereto.

The revised Declaration and Power of Attorney has been executed by F. Lindsey Scott on behalf of ETechMM, the assignee of the subject application. A Petition and an Affidavit setting forth the relevant facts relative to the authority for the signature on the Declaration and Power of Attorney, the proof of request for execution to the inventor, and the evidence of his refusal to sign, have been attached to the Petition and Affidavit. It is believed that this revised Declaration and Power of Attorney is now in acceptable form and is suitable for continuation of the prosecution and issuance of the subject application.

IN THE SPECIFICATION

Please delete the title and substitute therefor, the title "Procedure to Mobilize Asphaltene-Based Crude With a Micelle Solvent".

Q1 Please revise line 13 on page 1 to read as follows ---formation that produces a low-gravity, viscous [asphaltene-based] asphaltene-based crude and has no reservoir---

Q2 Please revise line 25 on page 1 to read as follows ---case of reservoirs which produce a low-gravity, viscous [asphaltene-based] asphaltene-based crude and have no---

Q3 Please revise line 3 on page 3 to read as follows ---gravity [asphaltene-based] asphaltene-based crude and have no reservoir drive, such as, water, gas, or at---

Please revise line 14 on page 4 by deleting the word "air" and substituting therefor the words ---a gas---

Please revise line 23 on page 4 by deleting the word "is" and substituting therefor the word ---and---

Please add at page 5, beginning at line 9, the following:

DR

BRIEF DESCRIPTION OF DRAWINGS

Q4 FIG. 1 graphically shows the production results of Example 1; and,

FIG. 2 graphically shows the test results described in Example 2.

96 Please revise the specification at page 5, line 19, to read as follows: ~~crude.~~ [Air] A gas, sometimes referred to herein as air, is injected for one hour at a surface pressure of less than 200 PSIG, after which~~---~~.

96 Please revise lines 1 and 2 of page 6 to read as follows:
~~---~~ formulas[as] detailed [in sections 15 through 65 page 3 and sections 5 through 35 page 4] at line 5, column 3 through line 40 column 4 of U.S. Patent No. 4,541,483 [and] which is hereby incorporated [herein] by reference. Preferably the alkyl or alkylaryl polyoxyalkylene phosphate ester surfactant is present in the mutual solvent in an amount equal to from about 5 to 50 weight percent of the mutual solvent. More preferably, the surfactant is present in the mutual solvent in an amount equal to from 10 to 20 weight percent of the mutual solvent and desirably from about 12 to 18 weight percent of the mutual solvent.~~---~~

97 Please amend the application by adding, after line 8 on page 7, the following:
~~---~~ A preferred mutual solvent comprises an alkyl or alkylaryl polyoxyalkylene phosphate ester surfactant dissolved in a mixed non-aqueous solvent comprising methanol in an amount from about 20 to 27 percent isopropanol in an amount of from about 40 to 44 percent, capryl alcohol in an amount from about 8 to 12 percent, and xylene in an amount of from about 23 to 27 weight percent. The 2 percent potassium chloride water and the mutual solvent are mixed in a volumetric ratio of about 1 to 1 to about 2 to 1. The micelle treating fluid may be injected to contact only the accumulation of asphaltene precipitate in the near wellbore of the formation. The gas may be injected a second time after the well has been shut in for 24 hours. The well may then be shut in for an additional 24 hours. The micelle treating fluid may be moved out into the reservoir to contact the low-gravity, high-viscosity, asphaltene-based crude indigenous to the subterranean formation and thus reducing its viscosity. The resulting lower viscosity asphaltene-based crude dispersed in the micelle treating fluid is then caused to migrate back into a stimulated well or an offset well in fluid communication with the stimulated well by use of a gas, such as air, carbon dioxide, nitrogen, or mixtures thereof either injected alone or augmented with injection water and or micelle treating fluid.~~---~~

Please amend the specification at page 7, line 13, by adding at the end of the line, the article ---a---.

Please amend the specification at page 9, line 5, by deleting the word "Foundation" and substituting therefor the word ---Formation---.

Please revise the application at page 13, line 4, by adding after the term "Graph #1" the parenthetical expression ---(FIG 1)---.

Please revise the specification at page 13, line 5, by adding after the term "Table #1" the word ---below---, and by adding, after the term "Graph #1" in line 5, the following Table 1 originally submitted with the application:

| TABLE 1 | |
|----------------|--|
| MONTH | MONTHLY PRODUCTION (BARRELS OF OIL) |
| OCTOBER, 1997 | 153.74 |
| NOVEMBER, 1997 | 157.97 |
| DECEMBER, 1997 | 174.08 |
| JANUARY, 1998 | 216.60 |
| FEBRUARY, 1998 | 253.73 |

Please revise the specification at page 13, line 12, by adding after the term "Graph #2" the parenthetical term ---(FIG 2)---.

IN THE ABSTRACT

Please delete the Abstract and substitute therefor the following abstract:

--A process for restoring the injectivity or productivity of a well penetrating a subterranean formation by injecting a micelle treating fluid into the subterranean formation via the well with the micelle treating fluid containing a 2% potassium chloride water solution and a mutual solvent